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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Keiichi Kitahara

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COOPER & DUNHAM, LLP
30 Rockefeller Plaza
20th Floor
NEW YORK, NY 10112

EXAMINER

ROBINSON, ELIZABETH A

ART UNIT

PAPER NUMBER

1794

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,255	Applicant(s) KITAHARA ET AL.	
	Examiner Elizabeth Robinson	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 5 and 8-13 are currently pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5 and 8-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 adds the limitation that the content of the ultraviolet absorber is 5 to 20 parts by weight based on 100 parts by weight of the ionizing radiation curable resin composition following curing. However, there is no support in the instant specification that the weight ratios or weight percentages are based on the weight after curing. All other claims depend from claim 1 and thus, also fail to comply with the written description requirement.

Claims 1-3, 5 and 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 2, it is unclear if the stated weight percentage limitations are for the cured or uncured layer. While the ultraviolet absorber content is stated as based on the resin composition following curing, it is unclear if the other weight percentages are also based on the cured layer. Since the coating mixture can include solvents, the weight percentages for the cured and uncured composition would be different. All other claims depend from claim 1 and thus, are rendered indefinite.

Regarding claims 8-10, the addition of the word "type" extends the scope of the claims so as to render them indefinite since it is unclear what "type" is intended to convey. The addition of the word "type" to the otherwise definite expression renders the definite expression indefinite by extending its scope. *Ex parte Copenhaver*, 109 USPQ 118 (Bd. App. 1955).

Claim Rejections - 35 USC § 103

Claims 1-3, 5 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onozawa et al. (US 6,103,370) in view of Nakamura et al. (US 2002/0085284) and in view of the Ciba® TINUVIN® 328 and 1130 product literature.

Regarding claim 1, Onozawa (Column 1, lines 43-50) teaches a hard coat sheet comprising a base sheet and a coat layer. The base sheet (Column 2, lines 8-12) can be a plastic film. The film can be a glare preventing film for a computer display (Column

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1, lines 6-14). The coat layer can comprise an ultraviolet absorbent (Column 3, lines 44-50). The resin of the coat layer can be cured by electron beam or ultraviolet radiation (ionizing radiation) (Column 2, lines 63-66). The coat layer can also comprise a filler, such as silica or acrylic powder, to provide an anti-glare property (Column 3, lines 19-28). The filler is present at 0.5 to 50 parts per 100 parts by weight of the acrylate resin. Since the acrylate resin can be the primary component of the coating (Example 1), the weight percentage limitation for the filler meets the limitation for the microparticles.

Onozawa does not teach the size or preferred shape of the filler.

Nakamura (Paragraph 9) teaches an anti-glare film for use on an image display device. The binder of the anti-glare layer is formed from the ionizing radiation curable resins (Paragraph 43), including the same types of resins (Paragraph 42) as in Onozawa. The matting agent particles for the anti-glare layer include silica particles and cross-linked acrylic particles (Paragraph 59). The preferred shape of the matting agent is spherical, in order to obtain a consistent anti-glare property (Paragraph 60). The size of the matting particles is from 1 to 5 microns (Paragraph 57), in order to have a sufficient degree of anti-glare behavior, while still maintaining a sharp transmission.

It would be obvious to one of ordinary skill in the art to use the size and shape anti-glare particles of Nakamura, as the anti-glare particles of Onozawa, in order to form an anti-glare layer having a consistent anti-glare property with a sufficient degree of anti-glare behavior, while still maintaining a sharp transmission.

Onozawa (Column 3, lines 44-50) teaches that ultraviolet absorbers can be added to the coat layer and uses one example absorber, TINUVIN® 1130 and lower concentrations of absorber in the examples, but does not preclude using a different ultraviolet absorber or different loadings.

As shown in the TINUVIN® 1130 product literature, TINUVIN® 1130 has a molecular weight of 637.

The TINUVIN® 328 product literature shows that TINUVIN® 328 has a molecular weight of 351.5. As shown by the transmittance spectrum of the two ultraviolet absorbers, TINUVIN® 328 has a lower transmittance in the ultraviolet spectrum than does TINUVIN® 1130 for the same loading. Thus, TINUVIN® 328 will be a more effective ultraviolet absorber than TINUVIN® 1130. The second page of the TINUVIN® 328 product literature teaches that the amount of TINUVIN® 328 required for optimum performance should be determined in trials covering a concentration range. Thus, the amount of absorber would be a results effective variable that would determine the degree of ultraviolet absorption of the coat layer.

It would be obvious to one of ordinary skill in the art to use TINUVIN® 328 as the ultraviolet absorber for the sheet of Onozawa, in order to have a more effective ultraviolet absorber than the example absorber and it would be obvious to one of ordinary skill in the art to vary the amount of absorber of Onozawa to amounts, including those presently claimed, in order to obtain a desired degree of ultraviolet absorption as is taught by the TINUVIN® 328 product literature.

Regarding claim 2, Onozawa (Column 2, lines 35-62) teaches that the resin of the coat layer can also comprise 0.1 to 100 parts by weight of an organopolysiloxane based on 100 parts by weight of the acrylate resin.

Regarding claims 3 and 5, Onozawa (Column 3, lines 61-62) teaches that the coat layer preferably has a thickness from 1 to 10 microns. Since this thickness includes thicknesses smaller than the particle size, the limitation is met. Further, Nakamura (Paragraphs 48 and 49) teaches that the desired internal scattering of the anti-glare layer can be imparted by having the matting particles size larger than the layer thickness.

Regarding claims 8-10, Ciba® TINUVIN® 328 is a benzotriazole ultraviolet absorber.

Regarding claims 11-13, as stated above, the microparticles can be silica particles.

Claims 1, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMan et al. (US 2004/0241469) in view of Onozawa et al. (US 6,103,370) and Nakamura et al. (US 2002/0085284).

McMan (Paragraphs 3-8) teaches a naphthalate polyester overcoated with a protective UV resistant coating comprising more than 10 weight percent benzotriazole UV absorber and a vinyl-functional crosslinkable film former. The naphthalate polyester (plastic) can be a multilayer optical film (Paragraph 43). The vinyl-functional crosslinkable film former can be cured by electron beam (Paragraph 31). The UV

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absorber can be TINUVIN® 328 (Paragraph 51) which has a molecular weight of 351.5. The coating composition can also comprise fillers having an average particle diameter of 1 to 10 microns which impart a hazy or diffuse appearance to the cured coating (Paragraph 56). McMan (Paragraph 56) teaches that the amount and type of the filler will be apparent to those skilled in the art.

McMan does not explicitly teach the loading of the microparticles, their material or their shape.

Onozawa teaches that a coat layer can also comprise a filler, such as silica or acrylic powder, to provide an anti-glare property (Column 3, lines 19-28). The filler is present at 0.5 to 50 parts per 100 parts by weight of the acrylate resin.

It would be obvious to one of ordinary skill in the art to use the filler and filler amount of Onozawa, as the filler and filler amount of McMan, in order to have a specific filler that has been shown to be effective as an anti-glare (provides a hazy or diffuse appearance) to a cured optical coating. Since the acrylate resin of McMan (Paragraph 50) can be the primary component of the coating, the weight percentage limitation for the filler meets the limitation for the microparticles.

Nakamura (Paragraph 9) teaches an anti-glare film for use on an image display device. The matting agent particles for the anti-glare layer include silica particles and cross-linked acrylic particles (Paragraph 59). The preferred shape of the matting agent is spherical, in order to obtain a consistent anti-glare property (Paragraph 60).

It would be obvious to one of ordinary skill in the art to use spherical filler particle for the filler particle of McMan, in order to have a consistent anti-glare property for the coated optical film.

Response to Arguments

Applicant's arguments filed May 22, 2009 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's argues that the examples of Onozawa only propose adding 1 to 1.5 parts by weight of absorber. However, "applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others." In re Courtright, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). While the examples of Onozawa show some absorber loading examples, Onozawa does not preclude other absorber loadings. As set forth above, it would be obvious to one of ordinary skill in the art to vary the amount of absorber of Onozawa to amounts, including those presently claimed, in order to obtain a desired degree of ultraviolet absorption as is taught by the TINUVIN® 328 product literature.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Robinson whose telephone number is (571)272-7129. The examiner can normally be reached on Monday- Friday 8 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. R./
Elizabeth Robinson
Examiner, Art Unit 1794

August 5, 2009

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794